

## **Staphylococcus aureus Control Methods**

**Personal Hygiene** Foodworkers should wash their hands frequently and effectively. When working with food, use clean working habits and avoid touching the skin.

**Illness Policy** Foodworkers with respiratory illness (frequent sneezing, coughing, or running nose) or skin eruptions and abrasions are a potential hazard for food safety. These people should limit their foodhandling until their symptoms are gone. Foodworkers with infected, uncovered cuts, diarrhea or vomiting are NOT permitted to work with food in a public food service establishment.

**Food Handling** Handle food with clean utensils, not your bare hands. When gloves are used, they must be changed often and the hands washed each time.

**Temperature Control** Reduce food handling time (from beginning preparation to service) to an absolute minimum—and no more than 2 hours at room temperature. Keep cooked food 140°F or hotter. Formation of the toxin is prevented when food are kept out of the danger zone (41° F-140°F). If formed, the toxin will not be destroyed by heating the food.

**Cooling** Leftovers should be cooled quickly (in less than 4 hours); use uncovered shallow pans rather than deep pots. Once cooled, leftovers should be reheated to at least 165°F. To help ensure food safety, reheat leftovers only once and then use or discard.

**Equipment Sanitization** Food-contact surfaces, equipment, and utensils should be washed, rinsed and sanitized regularly.

## **Cleaning and Sanitizing**

Cleaning and sanitizing often is important to reduce the number of germs on counters and equipment that are used for food preparation. Clean and rinse the surfaces of counters, cutting boards, and utensils before using a sanitizing solution.

To prepare a bleach and water sanitizer:  
mix 1 teaspoon of bleach per gallon of cool water.

Sanitizer can be mixed in a bucket. Clean sanitizing cloths should be returned to the solution often during use and stored in the solution when not in use. The solution will need to be changed every few hours (the bleach evaporates) or as the solution gets greasy or dirty.

Bleach solutions can also be put into air-tight spray bottles. When using spray bottles, fresh bleach solution should be made daily because bleach loses its effectiveness over time.

To use: spray or wipe the solution on a clean surface, let it stand for at least one minute, allow it to air dry, or wipe it off with a paper towel.

---

### **For More Information:**

#### **Benton-Franklin Health District**

Environmental Health Division

7102 W. Okanogan Pl.

Kennewick, WA 99336

(509) 460-4205

[www.bfhd.wa.gov](http://www.bfhd.wa.gov)

#### **Other related brochures available:**

"The Ill Foodworker"

"Handwashing"

#### **Websites:**

Centers for Disease Control and Prevention

[www.cdc.gov](http://www.cdc.gov)

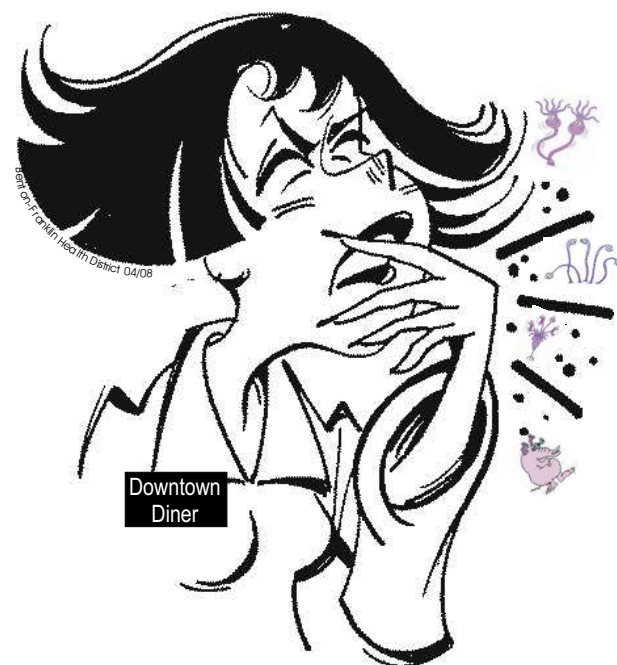
FDA's Bad Bug Book

<http://vm.cfsan.fda.gov/~mow/intro.html>

BFHD-E-0005 (Rev. 04/08)

# **Staphylococcus aureus**

## **Facts About Germs Series**



**[www.bfhd.wa.gov](http://www.bfhd.wa.gov)**



**S***taphylococcus aureus* ("staph") bacteria exist in air, dust, sewage, milk, food, and working surfaces. Although other animals can also carry the bacteria, people are almost always the source. At least 30-50% of healthy people carry the bacteria. The bacteria are commonly found in the nose, but can also come from the throat, hands, feces, hair, pimples, boils and abrasions on the skin. Staph causes a variety of infections and intoxications (poisonings) in people. It causes skin ailments such as boils, sties and impetigo; serious illnesses like toxic shock syndrome; and often causes infections of surgical wounds.

### **Staphylococcus aureus and food**

Staph bacteria are also a major cause of food poisoning. Foodworkers coughing, sneezing, or with poor handwashing habits in the kitchen can spread *S. aureus* to food. If the food is held at improper temperatures, the bacteria can grow and produce a toxin. Neither the bacteria nor the toxin will alter the smell, taste or appearance of the food. **Once formed, the toxin is not destroyed by cooking or boiling.**

Unlike many other bacteria, staph are very tolerant of salt and sugar and can grow over a wide range of pH (4.5-7.0) and temperatures (44°F-122°F). The bacteria also survive freezing temperatures. To prevent staph growth and toxin formation, keep potentially hazardous foods (especially cooked foods) out of the Danger Zone (41°-140°F).

### **Symptoms of Staph Poisoning from food**

Eating food contaminated with toxin can cause inflammation and irritation of the stomach and intestine in all people. An incubation period (period of time from eating the food until symptoms first occur) can be minutes, but is usually 2-4 hours.

The most common symptoms of staph poisoning are severe nausea, vomiting, abdominal cramping, and fatigue. Diarrhea can also occur. Deaths are very rare, but the symptoms may require hospitalization. The illness usually lasts 1-2 days.

## **Food Often Linked to Staph Poisoning:**

### **Cooked, High Protein**

Cooked meats, poultry, eggs, tuna and seafood; cream pastries and pies; milk and dairy products. [Uncooked foods generally have bacteria that out-compete for nutrients and prevent *S. aureus* from growing.]

### **Handled Often**

Food (including potato and pasta salads) that require considerable handling- like slicing, grinding, mixing, shaping, deboning- can get contaminated from either an infected foodworker or contaminated utensils.

### **Temperature Abused**

Food held in the Danger Zone (41°F-140°F) allow the bacteria to grow and produce toxin. Improper temperatures include food held at room temperature after preparation, food left on the counter overnight or allowed to cool slowly, or food held in equipment that does not keep the food hot or cold as necessary.

**A common scenario for transmission...** of staph poisoning occurs when food workers sneeze onto their hands, touch an infected cut or pick at acne. Without adequate handwashing, the foodworkers then dice cooked chicken for chicken salad and mix the ingredients by hand without a spoon. After several hours on the counter at room temperature, the microscopic bacteria have grown to millions and produced taste-less toxins. The chicken salad looks, smells and tastes great and is served. A few hours after dinner, however, everyone is nauseated and vomiting.

### **What went wrong in the above scenario?**

- ◇ Food workers should use tissues and wash their hands after sneezing. (All employees with vomiting, diarrhea, or infected cuts on the hands are required to stay away from food service until clear of infection.)
- ◇ Ready-to-eat food should be handled with barriers (gloves, tongs, spoons, etc.).
- ◇ All Potentially Hazardous Food must be held out of the Danger Zone (41° F-140°F) to keep bacteria from growing.

## **Personal Hygiene Tips**

The key to prevent illness is to prevent contamination of food. Handwashing and personal cleanliness is an important control measure in preventing food contamination with *Staphylococcus aureus*. Always wash your hands before handling food and after using the restroom. Proper handwashing involves the following steps:

- ✓ Get the **paper towel** ready
- ✓ **Wet** hands with warm water
- ✓ Use liquid or powdered **soap**
- ✓ **Scrub** hands, including fingernails, thoroughly with soapy lather for at least 10 seconds
- ✓ **Rinse** hands with warm, running water
- ✓ **Dry** hands with a paper towel



### **Other measures that will help prevent food contamination:**

- ◇ Wash your hands thoroughly after going to the bathroom, smoking or eating.
- ◇ Avoid touching or scratching your mouth, nose, hair and skin infections.
- ◇ Cover up coughs and sneezes with a tissue (or cough/sneeze into your shirt sleeve on your shoulder) and wash your hands.
- ◇ Keep yourself clean: bathe or shower regularly and wash your hands often.